

pending. The cancelling command is preferably a status command sent while the pending notify command is pending. The cancelling command is alternatively a duplicate of the pending notify command sent while the pending notify command is pending. Alternatively, the cancelling command is a notify cancel command sent while the pending notify command is pending. The network preferably substantially complies with a version of the IEEE 1394 standard. The cancelling command preferably substantially complies with a version of the AV/C protocol.

In another aspect of the present invention, a target device for communicating with a controlling device over a network, the target device comprises means for communicating with the controlling device over the network, the means for communicating including ability to receive a notify command from the controlling device, issue an interim response to the notify command to the controlling device and receive a cancelling command from the controlling device and means for cancelling coupled to the means for communicating for cancelling a pending notify command if a cancelling command is received from the controlling device while the pending notify command is pending. The cancelling command is preferably a status command sent while the pending notify command is pending. The cancelling command is alternatively a duplicate of the pending notify command sent while the pending notify command is pending. Alternatively, the cancelling command is a notify cancel command sent while the pending notify command is pending. The network preferably substantially complies with a version of the IEEE 1394 standard. The cancelling command preferably substantially complies with a version of the AV/C protocol.

In yet another aspect of the present invention, a target device configured to communicate with a controlling device over a network, the target device comprises an interface circuit configured to communicate with the controlling device over the network, the interface circuit including ability to receive a notify command from the controlling device, issue an interim response to the notify command and receive a cancelling command from the controlling device and a control circuit coupled to the interface circuit to cancel a pending notify command if a cancelling command is received from the controlling device while the

pending notify command is pending. The cancelling command is preferably a status command sent while the pending notify command is pending. The cancelling command is alternatively a duplicate of the pending notify command sent while the pending notify command is pending. Alternatively, the cancelling command is a notify cancel command sent while the pending notify command is pending. The network preferably substantially complies with a version of the IEEE 1394 standard. The cancelling command preferably substantially complies with a version of the AV/C protocol.

In still yet another aspect of the present invention, a notify cancel AV/C command data packet used to cancel a pending notify command at a target device, wherein the notify cancel AV/C command data packet is sent from a controlling device to a target device while the pending notify command is pending at the target device, and further wherein when a target device receives the notify cancel AV/C command data packet while the pending notify command is pending, the target device cancels the pending notify command.

In yet another aspect of the present invention, a network of devices coupled together comprises a controlling device configured to send a cancelling command to cancel a pending notify command and a target device including an interface circuit configured to communicate with the controlling device to receive the cancelling command from the controlling device and a control circuit coupled to the interface circuit to cancel a pending notify command if the cancelling command is received from the controlling device while the pending notify command is pending. The cancelling command is preferably a status command sent while the pending notify command is pending. The cancelling command is alternatively a duplicate of the pending notify command sent while the pending notify command is pending.

Alternatively, the cancelling command is a notify cancel command sent while the pending notify command is pending. The target device is preferably coupled to the controlling device over a network substantially complying with a version of the IEEE 1394 standard. The cancelling command preferably substantially complies with a version of the AV/C protocol.

In yet a further aspect of the present invention, a network of devices coupled together by a standard IEEE 1394 serial bus comprises a controlling device in communication with the

standard IEEE 1394 serial bus and configured for sending a cancelling command over the standard IEEE 1394 serial bus and a target device in communication with the standard IEEE 1394 serial bus and configured for receiving the cancelling command and cancelling a pending notify command if the cancelling command is received while the pending notify command is pending. The cancelling command is preferably a status command sent while the pending notify command is pending. The cancelling command is alternatively a duplicate of the pending notify command sent while the pending notify command is pending. Alternatively, the cancelling command is a notify cancel command sent while the pending notify command is pending.

BRIEF DESCRIPTION OF THE DRAWINGS:

Figure 1 illustrates a protocol of the IEEE 1394-2000 standard.

Figure 2 illustrates a standard AV/C command and response data packet in accordance with the AV/C Digital Interface Command Set for asynchronous data packet transmission over an IEEE 1394-2000 serial bus network.

Figures 3A and 3B show command and response data frames, respectively, formatted according to the standard AV/C protocol.

Figure 4 illustrates a data flow diagram of an immediate AV/C transaction.

Figure 5 illustrates a data flow diagram of a deferred AV/C transaction.

Figure 6 illustrates an exemplary IEEE 1394-2000 serial bus network including a computer system and a video camera.

Figure 7 illustrates a block diagram of the internal components of the computer system.

Figure 8 illustrates a data flow diagram showing the flow of transactions for cancelling a pending notify command of the preferred embodiment of the present invention.

Figure 9 illustrates a data flow diagram showing the flow of transactions for cancelling a pending notify command of an alternative embodiment of the present invention.